

Town of Amherst
Zoning Board of Appeals - Special Permit

DECISION

Applicant: Bell Atlantic Mobile of Massachusetts Corporation, Ltd, dba Verizon Wireless

Date application filed with the Town Clerk: February 14, 2006

Nature of request: A Special Permit to erect a 180 foot tall wireless communications tower on which Verizon Wireless will install cellular and PCS antennas and on which space will be leased to other carriers, and to construct an accessory equipment shelter at the base of the tower for operating equipment. Pursuant to Section 3.340.2 of the Zoning Bylaw

Address: 531 Pulpit Hill Road, commonly known as the Ruxton site (Map 5B, Parcel 33, R-O Zoning District)

Legal notice: Published on February 22nd and March 1st, 2006 in the Daily Hampshire Gazette and sent to abutters on February 21, 2006.

Board members: Tom Simpson, Barbara Ford and Hilda Greenbaum

Submissions: The petitioner submitted the following:

- A five page set of plans showing the proposed site plan, tower elevation, construction details and equipment shelter plans, drawn by Dewberry-Goodkind, Inc., dated 2/10/06
- Power Density calculations
- Verizon Wireless coverage maps, current and proposed
- Applicant's Statement and Request for waivers from Zoning Bylaw requirements
- FCC License
- Inspection Schedule for the proposed facility
- Two sets of photographic simulations, one in summer and one in winter (without leaves on the trees) of the proposed tower on the surrounding area.

Other submissions included:

- A letter from Stephanie Ciccarello, Wetlands Administrator, stating that the proposed location of the cell tower is not within any wetland areas or buffer zones, and that no further review from the Conservation Commission is required, dated 2/24/06.
- A memo from zoning staff outlining the Bylaw requirements, dated 3/3/06
- A memo from the Planning Director stating that the Design Review Board recommended approval of the cell tower design, dated 3/8/06
- A memo from the Planning Board recommending approval of the proposed cell tower, with five recommendations, dated 3/17/06

Site Visit: March 7, 2006

The Board met with Verizon engineer Bob Bennett and attorney James Sheils at the site. Town engineers Jason Skeels and Paul Dethier also were present. The following was observed:

- The large 32+ acre area owned by the Town that is commonly called the "Ruxton site"
- The rural area, with railroad tracks along the easterly border of the property, three houses to the east of the tracks, conservation land to the west and woods to the north and south.
- The fence at the entrance of the site and the paved area near the entrance where Survival Center and Town LSSE trailers are located
- Three buildings – a salt storage shed, a large garage used for DPW equipment and storage of Town documents, and a scale house, proposed for use as a DPW break-room
- The depression in the land where the proposed cell tower would be built.
- The stakes showing the 100' x 100' perimeter of the area Verizon Wireless will lease from the Town, located approximately 400 feet from the entrance
- The proposed 15-foot wide, 50-foot long access strip to the tower location, extending south from the paved area next to the DPW buildings
- The two wetland areas on the property, far away from the proposed cell tower site
- The piles of loam, chips, concrete and granite stockpiled by the DPW, plus the gravel removal area to the west of the proposed tower

Public Hearing: March 9, 2006

Bell Atlantic, dba Verizon Wireless, was represented by attorneys Ellen Freyman and Jim Sheils, and Verizon Regulatory Manager Sandy Carter.

Ms. Freyman presented the application at the hearing. She stated the following:

- The site was designated by the Town for a cell tower
- The Town solicited proposals in October, 2004 for a company to build a tower capable of co-locating six carriers on it
- Verizon Wireless was awarded the contract, and since then they have been working with the Town concerning location, visual impacts, environmental issues, and compatibility with the Amherst Department of Public Works (DPW)
- Verizon will be leasing a 100' x 100' area from the Town at the site on which the tower and equipment shed will be located.
- Within the 100' x 100' leased area will be a 70' x 70' fenced compound which will house the equipment shelter, transformer, propane tanks, tower, and space for future carriers' equipment shelters.
- Usually Verizon Wireless builds a 12' x 30' equipment shelter, but the Town needs some space within the building for their antennae equipment; hence they are requesting a 12' x 40' equipment shelter that will house both Verizon and the Town's equipment
- Because there has been vandalism at the site (writing on the buildings, break-ins of the trailers), they are requesting three rows of barbed wire at the top of the fence in order to protect the equipment.
- The design of the tower is monopole, with no guy wires, and is proposed to be 180 feet tall, capable of handling six carriers.
- Verizon would locate their antenna at a height of 150 feet, leaving 30 feet above for other panel antennas.
- Verizon will provide both cellular and PCS service.
- The northern part of Amherst is the most in need of coverage for wireless service. The other sections of town are serviced by four other Verizon Wireless facilities.
- The coverage maps submitted show the increased coverage areas after the proposed cell tower is built. A significant addition to coverage in North Amherst is shown on the maps.

- The UMass Verizon antennas are over capacity (two miles south of Ruxton); a new tower with Verizon antennas will help share capacity for the north-central part of Amherst.
- The applicant will build a gravel driveway from the paved area to the tower compound for access. A maintenance person comes once a month to inspect the equipment.
- Verizon Wireless sites are controlled remotely at all times in addition to the monthly visits.
- Photo simulations were done in July, 2005, and again in February, 2006. Section 3.340.2 of the Zoning Bylaw requires 8 photo simulations of the proposed tower shown from a one-mile radius from the site, at 45 degree intervals. Because the proposed tower site is located next to hills in several directions, the tower is not visible from most vantage points.
- Most of the submitted photos are within 1/4 mile from the proposed site, and from the locations where the tower would be visible. East Pleasant and Pine Streets to the south, plus a small section of Leverett and Pulpit Hill Roads immediately to the north-east are the only places where the proposed tower would be visible above the trees. Photos from five other locations less than 1/4 mile to the east show that the proposed tower could be visible through the trees in these immediate areas.
- The tower would not be visible from Puffer's Pond or other areas to the west.
- The applicant considers the location to be ideal; there would be very little visual impact from the proposed tower.

The Board inquired about the compound and the fencing around it. Ms. Freyman said that the fence would be 8 feet tall and would have three strands of barbed wire on top. The fence will be locked, and the DPW would have a key.

Board Chairman Simpson noted that the Zoning Bylaw, Section 3.340.2 requires that the tower, antennas and related structures be of neutral colors that blend with the surroundings. The applicant said that the tower will be made of galvanized steel that ages well and blends in over time. The tower at the University along East Pleasant Street is made of the same material, for example. Also, since the surrounding area of the proposed tower is an old gravel pit, the Verizon construction may actually enhance the site, the applicant said.

Mr. Simpson asked how the locations were chosen for the photos. Ms. Carter responded that the Verizon photographer drove around the proposed site in all directions, and picked places where the proposed tower may be visible. For those locations where a tower would not be visible, no pictures were taken. In February, the Town engineer, Jason Skeels, was the photographer and took more photographs than did Verizon from more vantage points, with the same results.

Mr. Simpson asked about the Bylaw requirement for written maintenance reports. Ms. Freyman replied that Verizon does not do written reports, since all of the monitoring is done on line. Previous Special Permits for Verizon Wireless facilities in Amherst have waived this requirement, and have substituted a condition that any change in the conditions or operation of the facility be reported to the Building Commissioner within 48 hours. Bonnie Weeks, Building Commissioner, stated she accepts this, with the compromise that the applicant provides the name and phone number of the contact person in case there is a mishap.

Mr. Simpson asked about the significance of the Federal Communication Commission form that the applicant submitted. The FCC permit is assigned to Cellco Partnership for Springfield, Chicopee and Holyoke, MA, he noted. The applicant said that Cellco is the same as Bell Atlantic, and the FCC gave a blanket permit for this area of Massachusetts.

Mr. Simpson asked about the type of coverage. The applicant explained that the two frequencies requested, 850 and 1900 Mhz, are for analog and digital coverage. Both are wireless, but the 1900 frequency is for Personal Communication Systems (PCS). The proposed antennas will help with both capacity and coverage in Amherst. The Verizon wireless sites all interact with each other. The design criteria used gives reliable service and hands off a signal from one place to another, maintaining signal strength.

Mr. Simpson asked about the propane tank. The petitioner said that this is for a backup generator in case of emergencies. They are the only wireless systems to have the backup capacity.

The Board asked about access and vehicular traffic. The applicant responded that the access road will be constructed of heavy gravel. During construction of the tower, large equipment will access the site, and there will be minor excavation for the tower itself. After construction, there will be one person inspecting once a month for Verizon Wireless.

Ms. Ford noted that with room for six carriers on the tower, the other companies can add antennas later. Wireless antennas need to be approximately 10 feet apart, but not all need the height that Verizon Wireless and the Town are requesting. Ms. Ford observed that the "ice bridge" shown on the map and the equipment structure will accommodate only Verizon Wireless. Each of the additional carriers will have their own equipment and structures within the fenced compound.

Ms. Ford asked if there were plans for landscaping around the compound. Ms. Freyman responded that the natural vegetation that exists seems most appropriate for the site. Ms. Carter added that if the Board wants landscaping within the 100' x 100' leased area, they will comply.

Ms. Weeks asked about the construction of the equipment building. The applicant responded that it would be a 12' x 40' brown stucco pre-fabricated building, with two doors and a black flat roof, and looks like a modular classroom. The Norwottuck Verizon Wireless tower in South Amherst has the same building, Ms. Freyman said. Motion-sensor lighting is the only lighting for the compound. The Board requested that the applicant submit a picture of the proposed equipment shelter.

Ms. Greenbaum noted that the cell tower in Northampton has a flashing strobe light at the top of it, but this is because of the Northampton airport.

The applicant said that Verizon will install the Town's equipment and antennas if they are available when Verizon is installing its equipment. She also said that a 9' x 9' section of their building will be reserved for Town equipment. The Town will be able to hook into Verizon's emergency generator if needed. Verizon will give the Town access to the compound, and the Town will give the wireless companies access to Ruxton property when the tower is built.

Kris Pacunas, head of the Town's Information Technology Department (IT), said that Amherst is one of the first towns in rural areas to use the PCS frequencies for receiving EVDO data transmission speeds. He spoke about the Town's need for co-location on the proposed tower. He said that the Town needs the 180-foot tower height for two types of communication:

1. Radio antennas for public safety and public works departments, to be located above the Verizon Wireless antennas on the cell tower. Town workers use both Verizon Wireless cell phones and Town radios, but it is difficult for them to communicate with one another in North Amherst without the proposed tower. As the Town begins to use its own wireless equipment, using ideal locations such as Ruxton, the Town will be able to phase out the use of Verizon cell phones, thus saving the Town money.

The back-up power via Verizon emergency equipment is important to the Town as well. Whip antennas on top of the tower may also be used for the DPW communication.

2. Data collection for the Town, which needs the 180-foot height for line-of-sight to other wireless data equipment mounted locations. Data collection will use the higher frequency bandwidths. A 400-foot height antenna would be best, but the proposed tower will help for North Amherst. The square plates like Verizon's will be needed for data collection, which will include GIS data, and eventually everything from parking tickets, Inspection Services reports in the field, to Town water and sewer systems.

Ms. Freyman said that Verizon Wireless is asking for four (4) waivers from Section 3.340.2 of the Zoning Bylaw, requirements for wireless a communications facility. Modifications of the standards are permitted if the Board finds that they facilitate co-location and telecommunication coverage throughout the Town. The waivers requested are:

1. Bylaw Section 3.340.2.1 limits the height of a tower to 125 feet in a residential district. The requested height is 180 feet because the topography of North Amherst and the needs of the Town require the additional height, as was discussed above.
2. Bylaw Section 3.340.2.5 requires that inspection reports for maintenance and repairs be submitted to the Building Commissioner. This was discussed earlier in the hearing, with a compromise agreed upon.
3. Section 3.340.2.2j requires the submission of simulated photos from 8 view lines from vantage points commonly used by the public. Because so much of the proposed site is obstructed by the hills of North Amherst, fewer view lines were discovered and fewer photos were taken. The two locations where the tower would be most visible were the northern end of East Pleasant Street, and along the Pine Street area. The tower will not be visible from Puffer's Pond and points west of the pond, Leverett Road to the north, or roads to the east of the site.
4. Section 3.340.2.3 stipulates that any proposal not co-locating its facility or proposing to locate in a residential district must provide written evidence why the facility cannot be co-located or built in a non-residential district. Because the Town picked the location and negotiated a contract with Verizon Wireless for this site (in an R-O District), Verizon Wireless is not able to comply with this requirement. The proposed building and tower will be located in a dip in the landscape however, thus hiding the compound from the road and making it less obtrusive to three neighboring residences to the east.

The Board asked about the backup power – how long the propane tank will last in an emergency. Also, who re-fuels the propane tank? The Board wondered if a larger tank might be safer and preferable. The applicants said that they would find out the information requested.

Ms. Greenbaum moved to continue the public hearing to March 28, 2006 at 7:30 p.m. Ms. Ford seconded the motion and the vote was unanimous.

Continued Public Hearing: March 28, 2006

Attorneys Ellen Freyman and Jim Sheils represented Verizon Wireless at the hearing continuation. As requested by the Board, Ms. Freyman submitted photographs of the type of equipment shelter that Verizon Wireless builds. The Board was satisfied with the design and appearance of the proposed shelter.

The Board asked about the size of the proposed propane tank that Verizon uses for emergency purposes. They had indicated that a 1000 gallon tank might be needed. As Ms. Ford noted, most

companies and municipalities have not updated their emergency planning since September 11, 2001. Mr. Sheils replied that he was sure Verizon has evaluated what is needed for major disasters. Ms. Freyman noted that none of the other carriers have emergency generators. But the Board stated that they are worried about the Town's emergency services, which will be linked to Verizon's. After making a phone call to one of Verizon's engineers, Ms. Freyman reported that the tank will be able to supply 48-72 hours of service for both Verizon Wireless and the Town's equipment. When asked where the supply trucks for the propane tank would come from, Ms. Freyman said that a local company would be used.

One member of the public spoke to the proposal. Larry Kelly, 596 South Pleasant Street, said that he thought that the Town spent too much money for the Ruxton site, but he does support this proposal for a wireless communications tower.

Ms. Greenbaum made a motion to close the evidentiary portion of the hearing. Ms. Ford seconded the motion, and the vote was unanimous to close the hearing.

Public Meeting:

The Board discussed the waivers needed to approve the application. They concluded that all waivers promoted the purpose of the Zoning Bylaw, Section 3.340.2, and improve safety in the Town. The waivers approved were:

1. The 180-foot height of the tower in a residential district. The Board found that the height promotes co-location and will improve communication in North Amherst, where wireless communication service is sparse. Ms. Ford also noted that the Town needs the height to enhance line-of-sight capabilities for the Town's police, fire and DPW wireless activities in particular.
2. The photo simulations required from 8 vantage points were waived because there were not 8 locations from which the proposed tower could be seen. The Board found that the submitted photographs from summer and winter to be satisfactory in predicting the visual impact of the proposed tower.
3. The Board waived the requirement that inspections reports be submitted to the Building Commissioner, with the understanding that the name and telephone number of a contact person will be given to the DPW's and Building Commissioner's offices by the petitioner.
4. The co-location and non-residential location was waived because the site was chosen by the Town. In addition, the location is remote, and the Board found that it will not significantly impact the character or appearance of the neighborhood or the area.

The Board compared the conditions of a previous Special Permit for a wireless communication facility, FY2006-00011, for Bell Atlantic to co-locate at the Amherst College smokestack. All of the conditions of the previous permit are applicable in this case; also, given the unique location on Town land, some additional conditions will be necessary for a permit, the Board concluded.

Findings:

The Board finds under Section 3.340.2 of the Zoning Bylaw, Wireless Communications, that:

1. The proposed facility's location is a remote 33+ acre Town-owned parcel in an Outlying Residential Zoning District. Since the proposed cell tower will be largely surrounded by woodlands, the visual impact on the neighborhood should not be significant. The Bylaw may allow a greater height (180 feet) than the required 125 feet if the proposal provides adequate safety, promotes co-location, and will not significantly impact the character and appearance of the neighborhood. The fenced and locked area will provide safety, and the

tower can accommodate other wireless facilities. High tension towers that cross Leverett Road nearby have a larger impact visually than will the tower.

2. The design facilities include:

- The new tower will not have lattice construction, three legs or require guy wire supports (3.340.2.2a)
- Safety signs will be the only signs on site. There will be no advertisements (3.340.2.2b)
- The equipment building exterior will have a non-reflective earth-tone color (3.340.2.2c)
- The tower and antennas will be of galvanized steel that blends in with the surroundings as it ages (3.340.2.2d&e)
- The utility lines servicing the antennas will be located underground, and others inside the shelter next to the tower, within a fenced compound (3.340.2.2f)
- No satellite dishes will be used (3.340.2.2g)
- The Verizon Wireless equipment building will be surrounded by an 8-foot chain link fence topped by three strands of barbed wire (3.340.2.2h).
- No lighting or special painting will be used on the tower; the only lighting in the area will be motion activated (3.340.2.2i)
- The submitted photo simulations from summer and winter indicate that the proposed tower will not be intrusive to the surrounding area (3.340.2.2j)
- Landscaping shall remain as is on site, with the exception of construction of the pad and surrounding fence in order to accommodate the tower Verizon equipment shed (3.340.2.2k)

3. The proposed facility will be designed to allow for co-location of additional wireless communication providers

4. The petitioner has provided certification from the FCC to operate in the greater Springfield area, which includes Amherst.

5. The petitioner will agree in a lease with the Town to maintain the facility and inspect the facility monthly. They also will provide the name of a Verizon Wireless maintenance person to the Building Commissioner and the DPW in case of emergencies.

6&7. The petitioner has supplied the Board and Building Commissioner with copies of all licenses and permits required, and shall remove all structures associated with this permit within one year of cessation of use.

The Board finds under Section 10.38 of the Zoning Bylaw, Specific Findings required of all Special Permits, that:

10.380 & 10.381 – The proposal is suitably located in the neighborhood because wireless service is needed in North Amherst and the petitioner was picked by the Town of Amherst to provide a wireless communication facility at the proposed location.

10.382, 10.383 & 10.385 – The proposal will not constitute a nuisance to abutters or pedestrians due to pollution, noise or lights since the Ruxton property is very large, the proposed tower location is well back from the road and surrounded by conservation area or woods. No residences are located nearby. Noise and exterior lighting will be minimal.

10.384, 10.387 & 10.388 – Adequate and appropriate facilities will be provided - the approved site plan indicates the location of the compound and equipment building, which will be fenced and is not close to Pulpit Hill Road. The facility will be partially screened by the existing landscape of trees, brush and piles of earth. A backup power source also will be provided.

10.386 & 10.387 – Pavement and parking is ample and already provided for at the property; the proposed wireless facility will need parking only for inspections or maintenance. Signage will be minimal – only a small emergency sign that is mandated by law will be visible at the fenced area.

10.389 – N/A The proposal has no waste involved in the operation on site. Construction debris will be removed.

10.390 – The proposal ensures protection from flood hazards, since the access road will be gravel and the soil drains well at the site. The location of the tower and compound will be located far away from any wetlands on the property. The natural vegetation and contours of the land will remain unchanged.

10.391 – The proposal protects, to the extent feasible, scenic features of the area in that the utilities will be underground, the wireless facility will be a monopole, the compound will be partially screened by its location, and the woods and trails to the west and south of the area will remain undisturbed. The facility and tower will not be visible at Puffer's Pond or to any other points to the west

10.398 – The proposal is in harmony with the general purpose and intent of the Zoning Bylaw because it will promote the convenience and well-being of the cell phone users of North Amherst, as well as providing Town departments (fire, police, DPW, etc) with better communication opportunities.

Zoning Board Decision:

Ms. Greenbaum made a motion to APPROVE the proposal, with conditions. Ms. Ford seconded the motion.

For all of the reasons stated above, the Board VOTED unanimously to GRANT a Special Permit to erect a 180 foot tall wireless communications tower on which Verizon Wireless will install cellular and PCS antennas, and on which space will be leased to other carriers; and to construct an accessory equipment shelter at the base of the tower for operating equipment, pursuant to Section 3.340.2 of the Zoning Bylaw on the premises at 531 Pulpit Hill Road, commonly known as the Ruxton site (Map 5B, Parcel 33, R-O Zoning District), as requested in the application filed by Bell Atlantic Mobile of Massachusetts, dba Verizon Wireless, subject to conditions.

TOM SIMPSON

BARBARA FORD

HILDA GREENBAUM

FILED THIS _____ day of _____, 2006 at _____,
in the office of the Amherst Town Clerk _____.

TWENTY-DAY APPEAL period expires, _____ 2006.
NOTICE OF DECISION mailed this _____ day of _____, 2006
to the attached list of addresses by _____, for the Board.

NOTICE OF PERMIT or Variance filed this _____ day of _____, 2006,
in the Hampshire County Registry of Deeds.

Town of Amherst
Zoning Board of Appeals

SPECIAL PERMIT

The Amherst Zoning Board of Appeals hereby grants a Special Permit to erect a 180-foot tall wireless communications tower on which Verizon Wireless will install cellular and PCS antennas, and on which space will be leased to other carriers; and to construct an accessory equipment shelter at the base of the tower for operating equipment, pursuant to Section 3.340.2 of the Zoning Bylaw on the premises at 531 Pulpit Hill Road, commonly known as the Ruxton site (Map 5B, Parcel 33, R-O Zoning District), as requested in the application filed by Bell Atlantic Mobile of Massachusetts Corporation, Ltd, dba Verizon Wireless, subject to the following conditions.

1. The new structure and antennas shall be constructed according to the plans submitted by the applicant and approved by the Board at the public meeting March 28, 2006 and on file at the zoning office of the Planning Department.
2. The site shall be managed as described in the Management Plan approved by the Board at the public meeting March 28, 2006.
3. Monthly inspections shall be made as described in Section 8 of the booklet submitted by the applicant and approved by the Board at the public meeting March 28, 2006. Any change in the conditions or operation of the facility that might affect the health and safety of the residents of the Town of Amherst shall be reported to the Building Commissioner as soon as is practicable, and not less than two (2) working days following the inception or discovery of the change.
4. The name and phone number of a contact person for the Verizon Wireless facility in case of emergencies shall be submitted to the Building Commissioner and the Department of Public Works.
5. All structures associated with the wireless communications use shall be located within an eight (8) foot high chain link fence topped by three (3) strands of barbed wire, secured and locked in a manner sufficient to prevent access by persons other than authorized personnel.
6. No signs shall be erected except for signs required under applicable state/federal laws or for emergency warning signs.
7. The gravel roadway constructed by Verizon Wireless to access the site shall be constructed with sufficient base material to support any construction equipment, and shall be maintained by Verizon Wireless as long as Verizon Wireless leases the site from the Town.
8. The Town shall have access to the Verizon Wireless compound and equipment shed at all times.
9. Certification shall be submitted to the Board stating that the backup propane tank for the emergency generator is large enough to operate both the Verizon Wireless and the Town equipment from 48 to 72 hours.
10. All exterior lighting shall be down-cast.

11. Bell Atlantic Mobile of MA shall be held responsible for compliance with all statements made in the submitted booklet, particularly Section 6, which was approved by the Board at the March 28, 2006 public meeting.
12. All structures associated with the wireless communications shall be removed within one (1) year of cessation of said use. Prior to issuance of a building permit for the wireless communications use, the petitioner shall post and submit a bond or other financial surety acceptable to the Building Commissioner in an amount sufficient to cover the cost of demolishing and/or removing the structures in the event the Building Commissioner condemns the applicant's structures or deems it to have been abandoned or vacant for more than one year. Said amount shall be certified by an engineer, architect or other qualified professional registered to practice in the Commonwealth of Massachusetts. In the event the posted amount does not cover the cost of demolition and/or removal, the Town may place a lien upon the property covering the difference in cost.

TOM SIMPSON, Chair
Amherst Zoning Board of Appeals

DATE